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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/332,726	06/14/1999	PAUL STEPHAN BEDROSIAN	7	3263

7590

01/07/2004

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EXAMINER

GEORGE, KEITH M

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/332,726

Applicant(s)

BEDROSIAN, PAUL STEPHAN

Examiner

Keith M. George

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This application has been reassigned to examiner Keith M. George, AU 2663.
2. Applicant's arguments to the Final Office action mailed 4 September 2003 are persuasive, however, upon further review, new prior art has been found and applied to the claims. Therefore, the finality of the previous office action has been removed. The Examiner apologizes for the additional delay this will add to the prosecution of this application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 9 and 17 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Itri, U.S. Patent 5,864,592, hereinafter Itri.

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5. Referring to claims 1, 9 and 17, Itri teaches a timing recovery system for digital subscriber line transceivers. This system, described in reference to figure 5, contains a master timing source supplied by the central office (external timing reference) and the remote terminal (receiver) derives the timing information from the received signal (transmitter generating a digital subscriber line transport signal including frequency and phase information) (column 1, lines 28-50 and column 5, lines 27-44). While not specifically described, it would be inherent for each of the transceivers shown to include a local oscillator in order to transmit or receive at a particular frequency.

6. Referring to claims 2, 3, 5, 10, 11, 13 18, 19 and 21, Itri teaches the system described in reference to claims 1, 9 and 17 above and also clearly teaches that in a High Bit-Rate Digital Subscriber Line (HDSL) system, a 1.544 Mbit/sec T-1 (DS1) data stream is transmitted over two channels each operating at a rate of 784 Kbit/sec (column 1, lines 19-22). It is clear from the remaining teachings of Itri that one of the intended uses of the invention is to operate in an HDSL system as described.

7. Referring to claims 6, 14 and 22, Itri teaches the system described in reference to claims 1, 9 and 17 above and also clearly teaches that a phase error detector detects the phase error and a command signal representing the phase error detected (synchronization status message) is communicated to a phase adjust circuit (column 5, lines 27-35).

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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9. Claims 4, 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itri in view of Near et al., U.S. Patent 5,068,877, hereinafter Near. Itri teaches the system described in reference to claims 1 and 9 above with the possible exception of using stratum 1 traceable synchronization information. Near teaches a method for synchronizing interconnected digital equipment and further teaches the basic concept of the stratum level. The stratum level refers to four defined levels of clock performance (1 through 4) as defined in standards documents such as in ANSI T1.101-1987. Smaller stratum level numbers represent more accurate timing performance. Particularly, a stratum 1 clock occupies the highest level in the synchronization hierarchy and is known as the frequency reference (common time base) for the entire synchronization network. It is a primary frequency standard with a minimum accuracy defined to be better than 1×10^{-11} . At the time the invention was made, it would have been obvious to a person of ordinary skill in the art that the common time base (master clock in figure 5 of Itri) should be as accurate as possible. Using a stratum 1 timing reference as taught by Near would clearly accomplish this well known goal.

10. Claims 7, 8 15 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Itri in view of Narasimha et al., U.S. Patent 5,638,379, hereinafter Narasimha. Itri teaches the system described in reference to claims 1 and 9 above with the possible exception of a timing reference signal generated by a building integrated timing supply having GPS capability and a transmitted clock is generated by an add-drop multiplexer associated with the transmitter. Narasimha teaches that in a digital network, there is a plurality of primary reference source checks implemented using GPS receiver technology (column 1, lines 30-34). Narasimha also teaches that the frame start signal and the line clock can be obtained from an add-drop multiplexer. At

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the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize the GPS and ADM teachings of Narasimha in the system of Itri. One of ordinary skill in the art would have been motivated to do this because both are teaching methods of distributing a synchronization signal and the teachings of Narasimha are also very well known in the art.

Response to Arguments

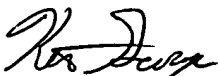
11. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

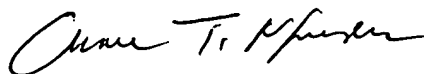
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 703-305-6531. The examiner can normally be reached on M-Th 7:00-4:30, alternate F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Keith M. George
31 December 2003



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
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